



⊕ H1 ⊕ H2 ⊕ H3 ⊕ H4

Note 1: This design follows Hayward W7ZOI and Kopski K3NHI 2009 paper on termination-insensitive IF amps [http://w7zoi.net/bidirectional_matched_amplifier.pdf], and W7ZOI's addition of automatic-gain control in his 2021 paper, "Adding AGC to a Termination Insensitive Amplifier" [<http://w7zoi.net/tia+agc.pdf>], itself an outgrowth of an earlier paper by Hayward and Damm WA7MLH, "The Hybrid Cascode: A General Purpose AGC IF Amplifier" [QST, Dec. 2007]

Note 2: All bi-polar transistors are 2N3904. The FET is a J310. All resistors are 1/4 Watt 5%. All capacitors are 0.10uF MLCC types. Diodes are 1N4148.

Note 3: This version leaves out the potentiometer W7ZOI included in his original design for testing purposes.

TIA IF Amp w/ Hybrid-Cascode AGC

mostly
DIY RF

Sheet: /
File: TIA_AGC_TH.sch

Drawn by T.F. Carney

Size: A4 Date: 2021-09-21

Rev: A

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